



NATIONAL OPEN UNIVERSITY OF NIGERIA
PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWAY, JABI-ABUJA
FACULTY OF SCIENCES
DEPARTMENT OF COMPUTER SCIENCE
JANUARY, 2021 EXAMINATIONS

Course Code: CIT383

Course Title: INTRODUCTION TO OBJECT-ORIENTED PROGRAMMING

Credit: 2

Time Allowed: 2 hours

INSTRUCTION: Answer question one and any other three (3) questions

QUESTION ONE (25MARKS) COMPULSORY

- a. Describe Polymorphism and identify its major types (5marks)
- b. Identify the examples of message passing styles (5marks)
- c. Write the syntax for importing individual classes and all classes in a package respectively (5marks)
- d. Describe the term Data hiding (5marks)
- e. Identify two categories of Data type (2marks)
- f. Differentiate between constructor and method (3marks)

QUESTION TWO

- a. Write a Java class to print the message "I love Java Programming" (6marks)
- b. Describe the function of "association property" of a class and identify two advantages of software reusability (6marks)
- c. Outline two functions of a destructor (3marks)

QUESTION THREE

- a. Outline and describe the motivations for modularising a program into methods (6marks)
- b. Show the comparison of conversion between implicit and explicit casts of numeric data (100) using sample code (6marks)
- c. Identify the components of a method signature (3marks)

QUESTION FOUR

- a. Demonstrate how a main method is declared and show the syntax of creating method (6marks)
- b. Describe the function of a method and summarize any 4 advantages of using method (7marks)
- c. What is ADT? (2marks)

QUESTION FIVE

- a. Describe the term Recursive Methods (5marks)
- b. State two limitations of overloading True and False operators (2marks)
- c. Differentiate between an implicit cast and an explicit cast (3marks)
- d. Explain the terms array and indexer (5marks)

